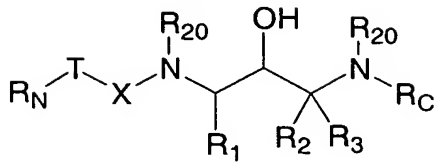
WHAT IS CLAIMED IS:

1. A compound of the formula:



or pharmaceutically acceptable salts or esters thereof;

wherein X is -(C=O)-, -(C=S)-, - $S(O)_{n1}$- or -(C=N-Z), wherein Z = R_{20} or -OR_{20}, and wherein n1 is 0, 1 or 2;

T is absent, NR_{20}, or O, with the proviso that when X is -(C=O), T is not absent;

wherein each R_{20} is independently H, -CN, C_{1-6} alkyl or alkenyl, C_{1-6} haloalkyl or C_{4-7} cycloalkyl, with the proviso that when Z is R_{20} or -OR_{20}, R_{20} is not -CN;

wherein R_1 is -$(CH_2)_{1-2}$-$S(O)_{0-2}$-(C_1-C_6 alkyl), or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, =O, -SH, -C≡N, -CF_3, -C_1-C_3 alkoxy, amino, mono- or dialkylamino, -N(R)C(O)R'-, -OC(=O)-amino and -OC(=O)-mono- or dialkylamino, or

C_2-C_6 alkenyl or C_2-C_6 alkynyl, each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF_3, C_1-C_3 alkoxy, amino, and mono- or dialkylamino, or

aryl, heteroaryl, heterocyclyl, -C_1-C_6 alkyl-aryl, -C_1-C_6 alkyl-heteroaryl, or -C_1-C_6 alkyl-heterocyclyl, where the ring portions of each are optionally substituted with 1, 2, 3, or 4 groups independently selected from halogen, -OH, -SH, -C≡N, -$NR_{105}R'_{105}$, -CO_2R, -N(R)COR', or -N(R)SO_2R', -C(=O)-(C_1-C_4) alkyl, -SO_2-amino, -SO_2-mono or dialkylamino, -C(=O)-amino, -C(=O)-mono or dialkylamino, -SO_2-(C_1-C_4) alkyl, or

C_1-C_6 alkoxy optionally substituted with 1, 2, or 3 groups which are independently selected from halogen, or

C_3-C_7 cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, amino, -C_1-C_6 alkyl and mono- or dialkylamino, or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, $-CF_3$, -C_1-C_3 alkoxy, amino, mono- or dialkylamino and -C_1-C_3 alkyl, or

C_2-C_{10} alkenyl or C_2-C_{10} alkynyl each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, amino, C_1-C_6 alkyl and mono- or dialkylamino; and the heterocyclyl group is optionally further substituted with oxo;

R and R' independently are hydrogen, C_1-C_{10} alkyl, C_1-C_{10} alkylaryl or C_1-C_{10} alkylheteroaryl;

wherein Rc is

(I) $-[-(CH_2)_{(0-8)}-(CH)(alkyl_1)(alkyl_2)]$, where $alkyl_1$ and $alkyl_2$ are stratight or branched C_{2-10} alkanyl, alkenyl or alkynyl, and wherein $alkyl_1$ and $alkyl_2$ attach to the same or different methylene carbon with the remaining open methylene valences occupied by hydrogen, thus forming a branched alkyl chain having between 8 and 20 carbon atoms in total;

the alkyl groups, $alkyl_1$ and $alkyl_2$ being optionally substituted with one, two or three substituents selected from the group consisting of C_1-C_3 alkyl, halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, -O-phenyl, -C(O)C_1-C_3 alkyl, $-NR_{1-a}R_{1-b}$ where R_{1-a} and R_{1-b} are -H or C_1-C_6 alkyl, -OC=O $NR_{1-a}R_{1-b}$, $-S(=O)_{0-2}$, $-NR_{1-a}C=O$ $NR_{1-a}R_{1-b}$, -C=O $NR_{1-a}R_{1-b}$, and $-S(=O)_2$ $NR_{1-a}R_{1-b}$;

(II) $-(C(Rc\text{-}x)(Rc\text{-}y))_{(0\text{-}4)}$-Rc-cycle

wherein each Rc-x and Rc-y is independently chosen from:

H

C_1 - C_6 alkyl

C_1 - C_6 alkoxy

C_2-C_6 alkenyl or alkynyl

$-(CH_2)_{0\text{-}4}$-Rc-cycle where Rc-cycle is as defined below and Rc-x and Rc-y may be taken together with the methylene carbon to which they jointly attach to form a spirocyclic ring of 3 to 7 atoms comprising carbon and up to 2 of O, $S(O)_{(0\text{-}2)}$ and $NR_{a'}$, wherein is $R_{a'}$ is H or $C_{1\text{-}4}$ alkyl;

wherein the spirocyclic ring may be fused to another ring to provide a bicyclic ring system comprising carbon and up to 2 of O, $S(O)_{(0\text{-}2)}$ and $NR_{a'}$. and comprising up to 9 atoms in total including,

Rc-cycle is an aryl, heteroaryl, or cycloalkyl ring or a fused-ring system consisting of no more than three rings where each of the rings is the same or different and is an aryl, heteroaryl, or cycloalkyl ring

wherein Rc-cycle is optionally substituted with up to four substituents independently selected from:

(1) C_1-C_6 alkyl optionally substituted with one, two or three substituents selected from the group consisting of C_1-C_3 alkyl, halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, and $-NR_{1\text{-}a}R_{1\text{-}b}$,

(2) C_2-C_6 alkenyl or alkynyl with one or two unsaturated bonds, optionally substituted with one, two or three substituents selected from the group consisting of -F, -Cl, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, and $-NR_{1\text{-}a}R_{1\text{-}b}$,

(3) halogen,

(4) C_1-C_6 alkoxy,

(5) $-C_1$-C_6 alkoxy optionally substituted with one, two, or three of -F,

(6) $-NR_{N-6}R_{N-7}$ where R_{N-6} and R_{N-7} are the same or different and are selected from the group consisting of:

(a) -H,

(b) $-C_1-C_6$ alkyl optionally substituted with one substitutent selected from the group consisting of:

(i) -OH, and

(ii) $-NH_2$,

(c) $-C_1-C_6$ alkyl optionally substituted with one to three -F, -Cl, -Br, or -I,

(d) $-C_3-C_7$ cycloalkyl,

(e) $-(C_1-C_2$ alkyl$)-(C_3-C_7$ cycloalkyl),

(f) $-(C_1-C_6$ alkyl$)-O-(C_1-C_3$ alkyl),

(g) $-C_2-C_6$ alkenyl with one or two double bonds,

(h) $-C_2-C_6$ alkynyl with one or two triple bonds,

(i) $-C_1-C_6$ alkyl chain with one double bond and one triple bond,

(j) $-R_{1\text{-aryl}}$ where $R_{1\text{-aryl}}$ is as defined above, and

(k) $-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(7) -OH,

(8) -C≡N,

(9) C_3-C_7 cycloalkyl, optionally substituted with one, two or three substituents selected from the group consisting of -F, -Cl, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, and $-NR_{1-a}R_{1-b}$,

(10) $-CO-(C_1-C_4$ alkyl),

(11) $-SO_2-NR_{1-a}R_{1-b}$,

(12) $-CO-NR_{1-a}R_{1-b}$,

(13) $-SO_2-(C_1-C_4$ alkyl),

and when there is a saturated carbon atom in Rc-cycle

(14) oxo,

(15) oxime

(16) ketal rings of 5 to 7 members, and

(17) a spirocyclic ring having from 3 to 7 atoms comprising carbon and when the ring size is 4-7 atoms optionally up to 2 of O, $S(O)_{(0-2)}$ and NR_a. (IV) $-(CR_{C-x}R_{C-y})_{0-4}$-heteroaryl,

(III) $-(CR_{C-x}R_{C-y})_{0-4}$-aryl-aryl ,

(IV) $-(CR_{C-x}R_{C-y})_{0-4}$-aryl-heteroaryl,

(V) $-(CR_{C-x}R_{C-y})_{0-4}$- heteroaryl-aryl,

(VI) $-(CR_{C-x}R_{C-y})_{0-4}$- heteroaryl-heteroaryl,

(VII) $-(CR_{C-x}R_{C-y})_{0-4}$- aryl-heterocycle,

(VIII) $-(CR_{C-x}R_{C-y})_{0-4}$-heteroaryl-heterocycle,

(IX) $-(CR_{C-x}R_{C-y})_{0-4}$-heterocycle-aryl,

(X) $-(CR_{C-x}R_{C-y})_{0-4}$-heterocycle-heteroaryl,

(XI) $-(CR_{C-x}R_{C-y})_{0-4}$- heterocycle-heterocycle,

(XII) $-[C(R_{C-1})(R_{C-2})]_{1-3}-[CO]_{0-1}-N-(R_{C-3})_2$ where each R_{C-1} is the same or different and is selected from the group consisting of: H, C_{1-4} alkyl and C_{1-4} alkoxy and where each R_{C-2} and R_{C-3} is independently selected from

(A) $-C_1-C_6$ alkyl, optionally substituted with one, two or three substituents selected from the group consisting of C_1-C_3 alkyl, -F, -Cl, -Br, -I, -OH, -SH, -C≡N, $-CF_3$, C_1-C_6 alkoxy, -O- phenyl, and $-NR_{1-a}R_{1-b}$,

(B) C_2-C_6 alkenyl or alkynyl with one or two unsaturated bonds, optionally substituted with one, two or three substituents selected from the group consisting of C_1-C_3 alkyl, -F, -Cl, -Br, -I, -OH, -SH, -C≡N, $-CF_3$, C_1-C_6 alkoxy, -O-phenyl, and $-NR_{1-a}R_{1-b}$,

(C) $-(CH_2)_{1-2}-S(O)_{0-2}-(C_1-C_6$ alkyl),

(D) $-(CH_2)_{0-4}-C_3-C_7$ cycloalkyl optionally substituted with one, two or three substituents selected from the group consisting of C_1-C_3 alkyl, -F, -Cl,

-Br, -I, -OH, -SH, -C≡N, $-CF_3$, C_1-C_6 alkoxy, -O- phenyl, $-NR_{1-a}R_{1-b}$,

(E) $-(CH_2)_{0-4}$-5-7 membered heterocycle optionally substituted with one, two or three substituents selected from the group consisting of C_1-C_3 alkyl, -F, -Cl, -Br, -I, -OH, -SH, -C≡N, $-CF_3$, C_1-C_6 alkoxy, -O- phenyl, oxo, $-NR_{1-a}R_{1-b}$,

(XIII) $-CH(aryl)_2$ where each aryl is the same or different,

(XIV) $-CH(heteroaryl)_2$ where each heteroaryl is the same or different and are as defined above,

(XVIII) -CH(aryl)(heteroaryl),

wherein R_N is R'_{100}, $-(CRR')_{1-6}R'_{100}$, $-(CRR')_{0-6}R_{100}$, $-(CRR')_{1-6}$-O-R'_{100}, $-(CRR')_{1-6}$-S-R'_{100}, $-(CRR')_{1-6}$-C(=O)-R_{100}, $-(CRR')_{1-6}$-SO_2-R_{100}, $-(CRR')_{1-6}$-NR_{100}-R'_{100} or $-SO_2R'_{100}$, with the proviso that when R_N is $-SO_2R'_{100}$, X is not $-S(=O)_n$- or -C(=S)-; wherein

R_{100} and R'_{100} independently represent aryl, heteroaryl, -aryl-W-aryl, -aryl-W-heteroaryl, -aryl-W-heterocyclyl, -heteroaryl-W-aryl, -heteroaryl-W-heteroaryl, -heteroaryl-W- heterocyclyl, -heterocyclyl-W-aryl, -heterocyclyl-W-heteroaryl, -heterocyclyl-W-heterocyclyl, $-CH[(CH_2)_{0-2}$-O-$R_{150}]-(CH_2)_{0-2}$-aryl, $-CH[(CH_2)_{0-2}$-O-$R_{150}]-(CH_2)_{0-2}$-heterocyclyl or $-CH[(CH_2)_{0-2}$-O-$R_{150}]-(CH_2)_{0-2}$-heteroaryl, where the ring portions of each are optionally substituted with 1, 2, or 3 groups independently selected from

-OR, $-NO_2$, halogen, -C≡N, $-OCF_3$, $-CF_3$, $-(CH_2)_{0-4}$-O-P(=O)(OR)(OR'), $-(CH_2)_{0-4}$-CO-$NR_{105}R'_{105}$, $-(CH_2)_{0-4}$-O-$(CH_2)_{0-4}$-$CONR_{102}R_{102}$', $-(CH_2)_{0-4}$-CO-(C_1-C_{12} alkyl), $-(CH_2)_{0-4}$-CO-(C_2-C_{12} alkenyl), $-(CH_2)_{0-4}$-CO-(C_2-C_{12} alkynyl), $-(CH_2)_{0-4}$-CO-$(CH_2)_{0-4}$(C_3-C_7 cycloalkyl), $-(CH_2)_{0-4}$-R_{110}, $-(CH_2)_{0-4}$-R_{120}, $-(CH_2)_{0-4}$-R_{130}, $-(CH_2)_{0-4}$-CO-R_{110}, $-(CH_2)_{0-4}$-CO-R_{120}, $-(CH_2)_{0-4}$-CO-R_{130}, $-(CH_2)_{0-4}$-CO-R_{140}, $-(CH_2)_{0-4}$-

$CO-O-R_{150}$, $-(CH_2)_{0-4}-SO_2-NR_{105}R'_{105}$, $-(CH_2)_{0-4}-SO-(C_1-C_8$ alkyl), $-(CH_2)_{0-4}-SO_2-(C_1-C_{12}$ alkyl), $-(CH_2)_{0-4}-SO_2-(CH_2)_{0-4}-(C_3-C_7$ cycloalkyl), $-(CH_2)_{0-4}-N(R_{150})-CO-O-R_{150}$, $-(CH_2)_{0-4}-N(R_{150})-CO-N(R_{150})_2$, $-(CH_2)_{0-4}-N(R_{150})-CS-N(R_{150})_2$, $-(CH_2)_{0-4}-N(R_{150})-CO-R_{105}$, $-(CH_2)_{0-4}-NR_{105}R'_{105}$, $-(CH_2)_{0-4}-R_{140}$, $-(CH_2)_{0-4}-O-CO-(C_1-C_6$ alkyl), $-(CH_2)_{0-4}-O-P(O)-(O-R_{110})_2$, $-(CH_2)_{0-4}-O-CO-N(R_{150})_2$, $-(CH_2)_{0-4}-O-CS-N(R_{150})_2$, $-(CH_2)_{0-4}-O-(R_{150})$, $-(CH_2)_{0-4}-O-R_{150}'-COOH$, $-(CH_2)_{0-4}-S-(R_{150})$, $-(CH_2)_{0-4}-N(R_{150})-SO_2-R_{105}$, $-(CH_2)_{0-4}-C_3-C_7$ cycloalkyl, (C_2-C_{10})alkenyl, or (C_2-C_{10})alkynyl, or

R_{100} is C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 R_{115} groups, or

R_{100} is $-(C_1-C_6$ alkyl$)-O-C_1-C_6$ alkyl) or $-(C_1-C_6$ alkyl$)-S-(C_1-C_6$ alkyl), each of which is optionally substituted with 1, 2, or 3 R_{115} groups, or

R_{100} is C_3-C_8 cycloalkyl optionally substituted with 1, 2, or 3 R_{115} groups;

W is $-(CH_2)_{0-4}-$, $-O-$, $-S(O)_{0-2}-$, $-N(R_{135})-$, $-CR(OH)-$ or $-C(O)-$;

R_{102} and R_{102}' independently are hydrogen, or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen, aryl or $-R_{110}$;

R_{105} and R'_{105} independently represent $-H$, $-R_{110}$, $-R_{120}$, C_3-C_7 cycloalkyl, $-(C_1-C_2$ alkyl$)-(C_3-C_7$ cycloalkyl), $-(C_1-C_6$ alkyl$)-O-(C_1-C_3$ alkyl), C_2-C_6 alkenyl, C_2-C_6 alkynyl, or C_1-C_6 alkyl chain with one double bond and one triple bond, or

C_1-C_6 alkyl optionally substituted with $-OH$ or $-NH_2$; or,

C_1-C_6 alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, or

R_{105} and R'_{105} together with the atom to which they are attached form a 3 to 7 membered carbocylic ring, where one member is optionally a heteratom selected from $-O-$, $-S(O)_{0-2}-$, -

$N(R_{135})$-, the ring being optionally substituted with 1, 2 or three R_{140} groups;

R_{115} at each occurrence is independently halogen, -OH, $-CO_2R_{102}$, $-C_1$-C_6 thioalkoxy, $-CO_2$-phenyl, $-NR_{105}R'_{135}$, $-SO_2$-(C_1-C_8 alkyl), $-C(=O)R_{180}$, R_{180}, $-CONR_{105}R'_{105}$, $-SO_2NR_{105}R'_{105}$, -NH-CO-(C_1-C_6 alkyl), -NH-C(=O)-OH, -NH-C(=O)-OR, -NH-C(=O)-O-phenyl, -O-C(=O)-(C_1-C_6 alkyl), -O-C(=O)-amino, -O-C(=O)-mono- or dialkylamino, -O-C(=O)-phenyl, -O-(C_1-C_6 alkyl)-CO_2H, $-NH-SO_2$-(C_1-C_6 alkyl), C_1-C_6 alkoxy or C_1-C_6 haloalkoxy;

R_{135} is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_7 cycloalkyl, $-(CH_2)_{0-2}$-(aryl), $-(CH_2)_{0-2}$-(heteroaryl), or $-(CH_2)_{0-2}$-(heterocyclyl);

R_{140} is heterocyclyl optionally substituted with 1, 2, 3, or 4 groups independently selected from C_1-C_6 alkyl, C_1-C_6 alkoxy, halogen, hydroxy, cyano, nitro, amino, mono(C_1-C_6)alkylamino, di(C_1-C_6)alkylamino, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 haloalkoxy, amino(C_1-C_6)alkyl, mono(C_1-C_6)alkylamino(C_1-C_6)alkyl, di(C_1-C_6)alkylamino(C_1-C_6)alkyl, and =O;

R_{150} is hydrogen, C_3-C_7 cycloalkyl, -(C_1-C_2 alkyl)-(C_3-C_7 cycloalkyl), C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 alkyl with one double bond and one triple bond, $-R_{110}$, $-R_{120}$, or C_1-C_6 alkyl optionally substituted with 1, 2, 3, or 4 groups independently selected from -OH, $-NH_2$, C_1-C_3 alkoxy, R_{110}, and halogen;

R_{150}' is C_3-C_7 cycloalkyl, -(C_1-C_3 alkyl)-(C_3-C_7 cycloalkyl), C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 alkyl with one double bond and one triple bond, $-R_{110}$, $-R_{120}$, or C_1-C_6 alkyl optionally substituted with 1, 2, 3, or 4 groups independently selected from -OH, $-NH_2$, C_1-C_3 alkoxy, R_{110}, and halogen;

R_{180} is selected from morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl, homomorpholinyl,

homothiomorpholinyl, homothiomorpholinyl S-oxide, homothiomorpholinyl S,S-dioxide, pyrrolinyl and pyrrolidinyl, each of which is optionally substituted with 1, 2, 3, or 4 groups independently selected from C_1-C_6 alkyl, C_1-C_6 alkoxy, halogen, hydroxy, cyano, nitro, amino, mono(C_1-C_6)alkylamino, di(C_1-C_6)alkylamino, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 haloalkoxy, amino(C_1-C_6)alkyl, mono(C_1-C_6)alkylamino(C_1-C_6)alkyl, di(C_1-C_6)alkylamino(C_1-C_6)alkyl, and =O;

R_{110} is aryl optionally substituted with 1 or 2 R_{125} groups;

R_{125} at each occurrence is independently halogen, amino, mono- or dialkylamino, -OH, -C≡N, $-SO_2-NH_2$, $-SO_2-NH-C_1-C_6$ alkyl, $-SO_2-N(C_1-C_6$ alkyl$)_2$, $-SO_2-(C_1-C_4$ alkyl), $-CO-NH_2$, -CO-NH-C_1-C_6 alkyl, or $-CO-N(C_1-C_6$ alkyl$)_2$, or

C_1-C_6 alkyl, C_2-C_6 alkenyl or C_2-C_6 alkynyl, each of which is optionally substituted with 1, 2, or 3 groups that are independently selected from C_1-C_3 alkyl, halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, amino, and mono- and dialkylamino, or

C_1-C_6 alkoxy optionally substituted with one, two or three of halogen;

R_{120} is heteroaryl, which is optionally substituted with 1 or 2 R_{125} groups; and

R_{130} is heterocyclyl optionally substituted with 1 or 2 R_{125} groups; and

R_2 is selected from the group consisting of H; C_1-C_6 alkyl, optionally substituted with 1, 2, or 3 substituents that are independently selected from the group consisting of C_1-C_3 alkyl, halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, and $-NR_{1-a}R_{1-b}$; wherein

R_{1-a} and R_{1-b} are -H or C_1-C_6 alkyl;

$-(CH_2)_{0-4}$-aryl; $-(CH_2)_{0-4}$-heteroaryl; C_2-C_6 alkenyl; C_2-C_6 alkynyl; $-CONR_{N-2}R_{N-3}$; $-SO_2NR_{N-2}R_{N-3}$; $-CO_2H$; and $-CO_2-(C_1-C_4$ alkyl);

R_3 is selected from the group consisting of H; C_1-C_6 alkyl, optionally substituted with 1, 2, or 3 substituents independently selected from the group consisting of C_1-C_3 alkyl, halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, and -$NR_{1-a}R_{1-b}$; -$(CH_2)_{0-4}$-aryl; -$(CH_2)_{0-4}$-heteroaryl; C_2-C_6 alkenyl; C_2-C_6 alkynyl; -CO-$NR_{N-2}R_{N-3}$; -SO_2-$NR_{N-2}R_{N-3}$; $-CO_2H$; and -CO-O-(C_1-C_4 alkyl);

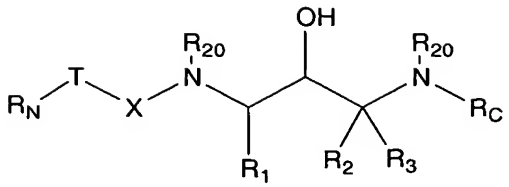
wherein

R_{N-2} and R_{N-3} at each occurrence are independently selected from the group consisting of -C_1-C_8 alkyl optionally substituted with 1, 2, or 3 groups independently selected from the group consisting of -OH, $-NH_2$, phenyl and halogen; -C_3-C_8 cycloalkyl; -(C_1-C_2 alkyl)-(C_3-C_8 cycloalkyl); -(C_1-C_6 alkyl)-O-(C_1-C_3 alkyl); -C_2-C_6 alkenyl; -C_2-C_6 alkynyl; -C_1-C_6 alkyl chain with one double bond and one triple bond; aryl; heteroaryl; heterocycloalkyl; or

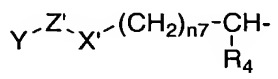
R_{N-2}, R_{N-3} and the nitrogen to which they are attached form a 5, 6, or 7 membered heterocycloalkyl or heteroaryl group, wherein said heterocycloalkyl or heteroaryl group is optionally fused to a benzene, pyridine, or pyrimidine ring, and said groups are unsubstituted or substituted with 1, 2, 3, 4, or 5 groups that at each occurrence are independently C_1-C_6 alkyl, C_1-C_6 alkoxy, halogen, halo C_1-C_6 alkyl, halo C_1-C_6 alkoxy, -CN, $-NO_2$, $-NH_2$, NH(C_1-C_6 alkyl), N(C_1-C_6 alkyl)(C_1-C_6 alkyl), -OH, $-C(O)NH_2$, -C(O)NH(C_1-C_6 alkyl), -C(O)N(C_1-C_6 alkyl)(C_1-C_6 alkyl), C_1-C_6 alkoxy C_1-C_6 alkyl, C_1-C_6 thioalkoxy, and C_1-C_6 thioalkoxy C_1-C_6 alkyl; or

R_2, R_3 and the carbon to which they are attached form a carbocycle of three thru seven carbon atoms, wherein one carbon atom is optionally replaced by a group selected from -O-, -S-, $-SO_2$-, or -NR_{N-2}-.

2. A compound of the formula:



or a pharmaceutically acceptable salt or ester thereof; wherein X, T, R_{20}, R_1, R_2, R_3 and R_C are as defined in claim 1 and wherein R_N is



wherein

R_4 is selected from the group consisting of H; NH_2; $-NH-(CH_2)_{n6}-R_{4-1}$; $-NHR_8$; $-NR_{50}C(O)R_5$; C_1-C_4 alkyl-$NHC(O)R_5$; $-(CH_2)_{0-4}R_8$; $-O-C_1-C_4$ alkanoyl; OH; C_6-C_{10} aryloxy optionally substituted with 1, 2, or 3 groups that are independently halogen, C_1-C_4 alkyl, $-CO_2H$, $-C(O)-C_1-C_4$ alkoxy, or C_1-C_4 alkoxy; C_1-C_6 alkoxy; aryl C_1-C_4 alkoxy; $-NR_{50}CO_2R_{51}$; $-C_1-C_4$ alkyl-$NR_{50}CO_2R_{51}$; $-C\equiv N$; $-CF_3$; $-CF_2-CF_3$; $-C\equiv CH$; $-CH_2-CH=CH_2$; $-(CH_2)_{1-4}-R_{4-1}$; $-(CH_2)_{1-4}-NH-R_{4-1}$; $-O-(CH_2)_{n6}-R_{4-1}$; $-S-(CH_2)_{n6}-R_{4-1}$; $-(CH_2)_{0-4}-NHC(O)-(CH_2)_{0-6}-R_{52}$; $-(CH_2)_{0-4}-R_{53}-(CH_2)_{0-4}-R_{54}$;

wherein

n_6 is 0, 1, 2, or 3;

n_7 is 0, 1, 2, or 3;

R_{4-1} is selected from the group consisting of $-SO_2-(C_1-C_8$ alkyl), $-SO-(C_1-C_8$ alkyl), $-S-(C_1-C_8$ alkyl), $-S-CO-(C_1-C_6$ alkyl), $-SO_2-NR_{4-2}R_{4-3}$; $-CO-C_1-C_2$ alkyl; $-CO-NR_{4-3}R_{4-4}$;

R_{4-2} and R_{4-3} are independently H, C_1-C_3 alkyl, or C_3-C_6 cycloalkyl;

R_{4-4} is alkyl, arylalkyl, alkanoyl, or arylalkanoyl;

R_{4-6} is-H or C_1-C_6 alkyl;

R_5 is selected from the group consisting of C_3-C_7 cycloalkyl; C_1-C_6 alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen,

$-NR_6R_7$, C_1-C_4 alkoxy, C_5-C_6 heterocycloalkyl, C_5-C_6 heteroaryl, C_6-C_{10} aryl, C_3-C_7 cycloalkyl C_1-C_4 alkyl, $-S-C_1$-C_4 alkyl, $-SO_2-C_1$-C_4 alkyl, $-CO_2H$, $-CONR_6R_7$, $-CO_2-C_1$-C_4 alkyl, C_6-C_{10} aryloxy; heteroaryl optionally substituted with 1, 2, or 3 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, C_1-C_4 haloalkyl, or OH; heterocycloalkyl optionally substituted with 1, 2, or 3 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, or C_2-C_4 alkanoyl; aryl optionally substituted with 1, 2, 3, or 4 groups that are independently halogen, OH, C_1-C_4 alkyl, C_1-C_4 alkoxy, or C_1-C_4 haloalkyl; and $-NR_6R_7$; wherein

R_6 and R_7 are independently selected from the group consisting of H, C_1-C_6 alkyl, C_2-C_6 alkanoyl, phenyl, $-SO_2-C_1$-C_4 alkyl, phenyl C_1-C_4 alkyl;

R_8 is selected from the group consisting of $-SO_2-$heteroaryl, $-SO_2-$aryl, $-SO_2-$heterocycloalkyl, $-SO_2-C_1-C_{10}$ alkyl, $-C(O)NHR_9$, heterocycloalkyl, $-S-C_1-C_6$ alkyl, $-S-C_2-C_4$ alkanoyl, wherein

R_9 is aryl C_1-C_4 alkyl, C_1-C_6 alkyl, or H;

R_{50} is H or C_1-C_6 alkyl;

R_{51} is selected from the group consisting of aryl C_1-C_4 alkyl; C_1-C_6 alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen, cyano, heteroaryl, $-NR_6R_7$, $-C(O)NR_6R_7$, C_3-C_7 cycloalkyl, or $-C_1$-C_4 alkoxy; heterocycloalkyl optionally substituted with 1 or 2 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, C_2-C_4 alkanoyl, aryl C_1-C_4 alkyl, and $-SO_2$ C_1-C_4 alkyl; alkenyl; alkynyl; heteroaryl optionally substituted with 1, 2, or 3 groups that are independently OH, C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, NH_2, $NH(C_1$-C_6 alkyl) or $N(C_1$-C_6 alkyl)(C_1-C_6 alkyl); heteroarylalkyl optionally

substituted with 1, 2, or 3 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, NH_2, $NH(C_1$-C_6 alkyl) or $N(C_1$-C_6 alkyl)(C_1-C_6 alkyl); aryl; heterocycloalkyl; C_3-C_8 cycloalkyl; and cycloalkylalkyl; wherein the aryl; heterocycloalkyl, C_3-C_8 cycloalkyl, and cycloalkylalkyl groups are optionally substituted with 1, 2, 3, 4 or 5 groups that are independently halogen, CN, NO_2, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_2-C_6 alkanoyl, C_1-C_6 haloalkyl, C_1-C_6 haloalkoxy, hydroxy, C_1-C_6 hydroxyalkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, C_1-C_6 thioalkoxy, C_1-C_6 thioalkoxy C_1-C_6 alkyl, or C_1-C_6 alkoxy C_1-C_6 alkoxy;

R_{52} is heterocycloalkyl, heteroaryl, aryl, cycloalkyl, $-S(O)_{0-2}$-C_1-C_6 alkyl, CO_2H, $-C(O)NH_2$, -C(O)NH(alkyl), -C(O)N(alkyl)(alkyl), $-CO_2$-alkyl, $-NHS(O)_{0-2}$-C_1-C_6 alkyl, $-N(alkyl)S(O)_{0-2}$-C_1-C_6 alkyl, $-S(O)_{0-2}$-heteroaryl, $-S(O)_{0-2}$-aryl, -NH(arylalkyl), -N(alkyl)(arylalkyl), thioalkoxy, or alkoxy, each of which is optionally substituted with 1, 2, 3, 4, or 5 groups that are independently alkyl, alkoxy, thioalkoxy, halogen, haloalkyl, haloalkoxy, alkanoyl, NO_2, CN, alkoxycarbonyl, or aminocarbonyl;

R_{53} is absent, -O-, -C(O)-, -NH-, -N(alkyl)-, $-NH-S(O)_{0-2}$-, $-N(alkyl)-S(O)_{0-2}$-, $-S(O)_{0-2}-NH$-, $-S(O)_{0-2}$- N(alkyl)-, -NH-C(S)-, or -N(alkyl)-C(S)-;

R_{54} is heteroaryl, aryl, arylalkyl, heterocycloalkyl, CO_2H, $-CO_2$-alkyl, -C(O)NH(alkyl), -C(O)N(alkyl) (alkyl), $-C(O)NH_2$, C_1-C_8 alkyl, OH, aryloxy, alkoxy, arylalkoxy, NH_2, NH(alkyl), N(alkyl) (alkyl), or $-C_1$-C_6 alkyl-CO_2-C_1-C_6 alkyl, each of which is optionally substituted with 1, 2, 3, 4, or 5 groups that are independently alkyl, alkoxy, CO_2H, $-CO_2$-alkyl, thioalkoxy, halogen, haloalkyl, haloalkoxy,

hydroxyalkyl, alkanoyl, NO_2, CN, alkoxycarbonyl, or aminocarbonyl;

X' is selected from the group consisting of $-C_1-C_6$ alkylidenyl optionally optionally substituted with 1, 2, or 3 methyl groups; and $-NR_{4-6}-$; or

R_4 and R_{4-6} combine to form $-(CH_2)_{n10}-$, wherein

n_{10} is 1, 2, 3, or 4;

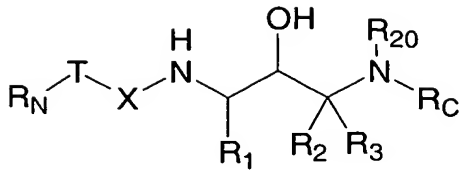
Z' is selected from the group consisting of a bond; SO_2; SO; S; and C(O);

Y is selected from the group consisting of H; C_1-C_4 haloalkyl; C_5-C_6 heterocycloalkyl; C_6-C_{10} aryl; OH; $-N(Y_1)(Y_2)$; C_1-C_{10} alkyl optionally substituted with 1 thru 3 substituents which can be the same or different and are selected from the group consisting of halogen, hydroxy, alkoxy, thioalkoxy, and haloalkoxy; C_3-C_8 cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from C_1-C_3 alkyl, and halogen; alkoxy; aryl optionally substituted with halogen, alkyl, alkoxy, CN or NO_2; arylalkyl optionally substituted with halogen, alkyl, alkoxy, CN or NO_2; wherein

Y_1 and Y_2 are the same or different and are H; C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 substituents selected from the group consisting of halogen, C_1-C_4 alkoxy, C_3-C_8 cycloalkyl, and OH; C_2-C_6 alkenyl; C_2-C_6 alkanoyl; phenyl; $-SO_2-C_1-C_4$ alkyl; phenyl C_1-C_4 alkyl; or C_3-C_8 cycloalkyl C_1-C_4 alkyl; or

Y_1, Y_2 and the nitrogen to which they are attached form a ring selected from the group consisting of piperazinyl, piperidinyl, morpholinyl, and pyrolidinyl, wherein each ring is optionally substituted with 1, 2, 3, or 4 groups that are independently C_1-C_6 alkyl, C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkyl, or halogen.

3. A compound according to claim 1 of the formula



or a pharmaceutically acceptable salt or ester thereof wherein

R_C is selected from $-(CH_2)_{0-3}-(C_3-C_8)$ cycloalkyl wherein the cycloalkyl is optionally substituted with 1, 2, or 3 groups independently selected from $-R_{205}$; and $-CO_2-(C_1-C_4$ alkyl); $-(CR_{245}R_{250})_{0-4}$-aryl; $-(CR_{245}R_{250})_{0-4}$-heteroaryl; $-(CR_{245}R_{250})_{0-4}$-heterocycloalkyl; $-(CR_{245}R_{250})_{0-4}$-aryl-heteroaryl; $-(CR_{245}R_{250})_{0-4}$-aryl-heterocycloalkyl; $-(CR_{245}R_{250})_{0-4}$-aryl-aryl; $-(CR_{245}R_{250})_{0-4}$-heteroaryl-aryl; $-(CR_{245}R_{250})_{0-4}$-heteroaryl-heterocycloalkyl; $-(CR_{245}R_{250})_{0-4}$-heteroaryl-heteroaryl; $-CHR_{245}-CHR_{250}$-aryl; $-(CR_{245}R_{250})_{0-4}$-heterocycloalkyl-heteroaryl; $-(CR_{245}R_{250})_{0-4}$-heterocycloalkyl-heterocycloalkyl; $-(CR_{245}R_{250})_{0-4}$-heterocycloalkyl-aryl; a monocyclic or bicyclic ring of 5, 6, 7 8, 9, or 10 carbons fused to 1 or 2 aryl, heteroaryl, or heterocycloalkyl groups;

wherein 1, 2 or 3 carbons of the monocyclic or bicyclic ring are optionally replaced with -NH-, $-N(CO)_{0-1}R_{215}-$, $-N(CO)_{0-1}R_{220}-$, -O-, or $-S(=O)_{0-2}-$, and wherein the monocyclic or bicyclic ring is optionally substituted with 1, 2 or 3 groups that are independently $-R_{205}$, $-R_{245}$, $-R_{250}$ or =O;

and $-C_2-C_6$ alkenyl optionally substituted with 1, 2, or 3 R_{205} groups;

wherein each aryl or heteroaryl group attached directly or indirectly to the $-(CR_{245}R_{250})_{0-4}$ group is optionally substituted with 1, 2, 3 or 4 R_{200} groups;

wherein each heterocycloalkyl attached directly or indirectly to the $-(CR_{245}R_{250})_{0-4}$ group is optionally substituted with 1, 2, 3, or 4 R_{210};

R_{200} at each occurrence is independently selected from $-C_1-C_6$ alkyl optionally substituted with 1, 2,

or 3 R_{205} groups; -OH; $-NO_2$; -halogen; -C≡N; $-(CH_2)_{0-4}-CO-NR_{220}R_{225}$; $-(CH_2)_{0-4}-CO-(C_1-C_8$ alkyl); $-(CH_2)_{0-4}-CO-(C_2-C_8$ alkenyl); $-(CH_2)_{0-4}-CO-(C_2-C_8$ alkynyl); $-(CH_2)_{0-4}-CO-(C_3-C_7$ cycloalkyl); $-(CH_2)_{0-4}-(CO)_{0-1}$-aryl; $-(CH_2)_{0-4}-(CO)_{0-1}$-heteroaryl; $-(CH_2)_{0-4}-(CO)_{0-1}$-heterocycloalkyl; $-(CH_2)_{0-4}-CO_2R_{215}$; $-(CH_2)_{0-4}-SO_2-NR_{220}R_{225}$; $-(CH_2)_{0-4}-S(O)_{0-2}-(C_1-C_8$ alkyl); $-(CH_2)_{0-4}-S(O)_{0-2}-(C_3-C_7$ cycloalkyl); $-(CH_2)_{0-4}-N(H$ or $R_{215})-CO_2R_{215}$; $-(CH_2)_{0-4}-N(H$ or $R_{215})-SO_2-R_{220}$; $-(CH_2)_{0-4}-N(H$ or $R_{215})-CO-N(R_{215})_2$; $-(CH_2)_{0-4}-N(-H$ or $R_{215})-CO-R_{220}$; $-(CH_2)_{0-4}-NR_{220}R_{225}$; $-(CH_2)_{0-4}-O-CO-(C_1-C_6$ alkyl); $-(CH_2)_{0-4}-O-(R_{215})$; $-(CH_2)_{0-4}-S-(R_{215})$; $-(CH_2)_{0-4}-O-(C_1-C_6$ alkyl optionally substituted with 1, 2, 3, or 5 -F); $-C_2-C_6$ alkenyl optionally substituted with 1 or 2 R_{205} groups; $-C_2-C_6$ alkynyl optionally substituted with 1 or 2 R_{205} groups; adamantly, and $-(CH_2)_{0-4}-C_3-C_7$ cycloalkyl;

each aryl and heteroaryl group included within R_{200} is optionally substituted with 1, 2, or 3 groups that are independently $-R_{205}$, $-R_{210}$ or $-C_1-C_6$ alkyl substituted with 1, 2, or 3 groups that are independently R_{205} or R_{210};

each heterocycloalkyl group included within R_{200} is optionally substituted with 1, 2, or 3 groups that are independently R_{210};

R_{205} at each occurrence is independently selected from $-C_1-C_6$ alkyl, $-C_2-C_6$ alkenyl, $-C_2-C_6$ alkynyl, $-C_1-C_6$ haloalkoxy, $-(CH_2)_{0-3}(C_3-C_7$ cycloalkyl), -halogen, $-(CH_2)_{0-6}-OH$, -O-phenyl, OH, SH, $-(CH_2)_{0-6}-C\equiv N$, $-(CH_2)_{0-6}-C(=O)NR_{235}R_{240}$, $-CF_3$, $-C_1-C_6$ alkoxy, C_1-C_6 alkoxycarbonyl, and $-NR_{235}R_{240}$;

R_{210} at each occurrence is independently selected from $-C_1-C_6$ alkyl optionally substituted with 1, 2, or 3 R_{205} groups; $-C_2-C_6$ alkenyl optionally substituted with 1, 2, or 3 R_{205} groups; C_1-C_6 alkanoyl; $-SO_2-(C_1-C_6$ alkyl); $-C_2-C_6$ alkynyl optionally substituted with 1, 2, or 3 R_{205} groups; -halogen; $-C_1-C_6$ alkoxy; $-C_1-C_6$ haloalkoxy; $-NR_{220}R_{225}$; -OH; $-C\equiv N$; $-C_3-C_7$ cycloalkyl optionally substituted with 1, 2, or 3 R_{205} groups; $-CO-(C_1-C_4$ alkyl); $-SO_2-NR_{235}R_{240}$; $-CO-NR_{235}R_{240}$; $-SO_2-(C_1-C_4$ alkyl); and =O;

R_{215} at each occurrence is independently selected from $-C_1-C_6$ alkyl, $-(CH_2)_{0-2}-$(aryl), $-C_2-C_6$ alkenyl, $-C_2-C_6$ alkynyl, $-C_3-C_7$ cycloalkyl, $-(CH_2)_{0-2}-$(heteroaryl), and $-(CH_2)_{0-2}-$(heterocycloalkyl); wherein the aryl group included within R_{215} is optionally substituted with 1, 2, or 3 groups that are independently $-R_{205}$ or $-R_{210}$; wherein the heterocycloalkyl and heteroaryl groups included within R_{215} are optionally substituted with 1, 2, or 3 R_{210};

R_{220} at each occurrence is independently H, $-C_1-C_6$ alkyl, -CHO, hydroxy C_1-C_6 alkyl, C_1-C_6 alkoxycarbonyl, -amino C_1-C_6 alkyl, $-SO_2-C_1-C_6$ alkyl, C_1-C_6 alkanoyl optionally substituted with up to three halogens, $-C(O)NH_2$, $-C(O)NH(C_1-C_6$ alkyl), $-C(O)N(C_1-C_6$ alkyl)$(C_1-C_6$ alkyl), -halo C_1-C_6 alkyl, $-(CH_2)_{0-2}-(C_3-C_7$ cycloalkyl), $-(C_1-C_6$ alkyl)$-O-(C_1-C_3$ alkyl), $-C_2-C_6$ alkenyl, $-C_2-C_6$ alkynyl, -aryl, -heteroaryl, or -heterocycloalkyl; wherein the aryl, heteroaryl and heterocycloalkyl groups included within R_{220} and R_{225} is optionally substituted with 1, 2, or 3 R_{270} groups,

R_{270} at each occurrence is independently $-R_{205}$, $-C_1-C_6$ alkyl optionally substituted with 1, 2, or 3 R_{205} groups; $-C_2-C_6$ alkenyl optionally substituted with 1, 2, or 3 R_{205} groups; $-C_2-C_6$ alkynyl optionally substituted with 1, 2, or 3 R_{205} groups; -phenyl; -halogen; $-C_1-C_6$ alkoxy; $-C_1-C_6$ haloalkoxy; $-NR_{235}R_{240}$; -OH; -C≡N; $-C_3-C_7$ cycloalkyl optionally substituted with 1, 2, or 3 R_{205} groups; $-CO-(C_1-C_4$ alkyl); $-SO_2-NR_{235}R_{240}$; $-CO-NR_{235}R_{240}$; $-SO_2-(C_1-C_4$ alkyl); and =O;

R_{235} and R_{240} at each occurrence are independently -H, $-C_1-C_6$ alkyl, C_2-C_6 alkanoyl, $-SO_2-(C_1-C_6$ alkyl), or -phenyl;

R_{245} and R_{250} at each occurrence are independently selected from H, $-(CH_2)_{0-4}CO_2C_1-C_4$ alkyl, $-(CH_2)_{0-4}C(=O)C_1-C_4$ alkyl, $-C_1-C_4$ alkyl, $-C_1-C_4$ hydroxyalkyl, $-C_1-C_4$ alkoxy, $-C_1-C_4$ haloalkoxy, $-(CH_2)_{0-4}-C_3-C_7$ cycloalkyl, $-C_2-C_6$ alkenyl, $-C_2-C_6$ alkynyl, $-(CH_2)_{0-4}$ aryl, $-(CH_2)_{0-4}$ heteroaryl, and $-(CH_2)_{0-4}$ heterocycloalkyl, or

R_{245} and R_{250} are taken together with the carbon to which they are attached to form a monocycle or bicycle of 3, 4, 5, 6, 7 or 8 carbon atoms, where 1, 2, or 3 carbon atoms are optionally replaced by 1, 2, or 3 gropus that are independently -O-, -S-, $-SO_2-$, -C(O)-, $-NR_{220}-$, or $-NR_{220}R_{220}-$ wherein both R_{220} groups are alkyl; and wherein the ring is optionally substituted with 1, 2, 3, 4, 5, or 6 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, hydroxyl, NH_2, $NH(C_1-C_6$ alkyl), $N(C_1-C_6$ alkyl)$(C_1-C_6$ alkyl), $-NH-C(O)C_1-C_5$ alkyl, $-NH-SO_2-(C_1-C_6$ alkyl), or halogen;

wherein the aryl, heteroaryl or heterocycloalkyl groups included within R_{245} and R_{250} are optionally

substituted with 1, 2, or 3 groups that are independenly halogen, C_{1-6} alkyl, CN or OH.

4. A compound according to claim 3, wherein

R_1 is C_1-C_{10} alkyl optionally substituted with 1 or 2 groups independently selected from halogen, -OH, =O, -CN, -CF_3, -OCF_3, -C_3-C_7 cycloalkyl, -C_1-C_4 alkoxy, amino, mono-dialkylamino, aryl, heteroaryl or heterocycloalkyl, wherein the aryl group is optionally substituted with 1 or 2 R_{50} groups;

R_{50} is halogen, OH, CN, -CO-(C_1-C_4 alkyl), -NR_7R_8, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 alkoxy, and C_3-C_8 cycloalkyl;

R_7 and R_8 are selected from H; -C_1-C_4 alkyl optionally substituted with 1, 2, or 3 groups selected from -OH, -NH_2 and halogen; -C_3-C_6 cycloalkyl; -(C_1-C_4 alkyl)-O-(C_1-C_4 alkyl); -C_2-C_4 alkenyl; and -C_2-C_4 alkynyl;

R_C is selected from -$(CR_{245}R_{250})_{0-4}$-aryl; -$(CR_{245}R_{250})_{0-4}$-heteroaryl; -$(CR_{245}R_{250})_{0-4}$-heterocycloalkyl; where the aryl and heteroaryl groups attached to the -$(CR_{245}R_{250})_{0-4}$- group are optionally substituted with 1, 2, 3 or 4 R_{200} groups; where the heterocycloalkyl group attached to the -$(CR_{245}R_{250})_{0-4}$ group is optionally substituted with 1, 2, 3, or 4 R_{210} groups; and

R_{245} R_{250}, R_{200}, and R_{210} are as defined above.

5. A compound according to claim4, wherein

R_C is -$(CR_{245}R_{250})_{0-4}$-heterocycloalkyl; where the heterocycloalkyl group attached to the -$(CR_{245}R_{250})_{0-4}$- group is optionally substituted with 1, 2, 3, or 4 R_{210} groups, wherein R_{245}, R_{250}, and R_{210} are as defined above.

6. A compound according to claim 5, wherein

R_1 is C_1-C_{10} alkyl substituted with one aryl group, where the aryl group is optionally substituted with 1 or 2 R_{50} groups;

R_C is $-(CR_{245}R_{250})_{1-4}$-aryl or $-(CR_{245}R_{250})_{1-4}$-heteroaryl,

R_{245} and R_{250} are independently selected from H, $-(CH_2)_{0-4}CO_2C_1$-C_4 alkyl, $-(CH_2)_{0-4}CO_2H$, $-C_1$-C_4 alkyl, $-(C_1$-C_4 alkyl)OH, or

R_{245}, R_{250} and the carbon to which they are attached form a monocycle or bicycle of 3, 4, 5, 6, 7 or 8 carbon atoms, where 1 or 2 carbon atoms are optionally replaced by -O-, -S-, $-SO_2-$, or $-NR_{220}-$, where R_{220} is as defined above; and

wherein the aryl and heteroaryl groups attached to the $-(CR_{245}R_{250})_{1-4}-$ groups are optionally substituted with 1 or 2 R_{200} groups.

7. A compound according to claim 3, wherein

R_C is $(CR_{245}R_{250})_1$-aryl, where the aryl (preferably phenyl or naphthyl, more preferably phenyl) is optionally substituted with 1, 2, or 3 R_{200} groups; and

R_{245} is H and R_{250} is H or C_1-C_6 alkyl; or

R_{245} and R_{250} are independently C_1-C_3 alkyl (preferably both are methyl); or

$CR_{245}R_{250}$ represents a C_3-C_7 cycloalkyl group.

8. A compound according to claim 7, wherein

the $(CR_{245}R_{250})_1$-aryl is $(CR_{245}R_{250})_1$-phenyl where the phenyl is optionally substituted with 1, 2, or 3 R_{200} groups.

9. A compound according to claim 8, wherein the phenyl in $(CR_{245}R_{250})_1$-phenyl is substituted with

1-3 independently selected R_{200} groups, or

1 or 2 independently selected R_{200} groups, and

1 heteroaryl group optionally substituted with 1 R_{200} group or

1 phenyl group optionally substituted with 1 R_{200} group.

10. A compound according to claim 8, wherein R_{245} is hydrogen and R_{250} is C_1-C_3 alkyl.

11. A compound according to claim 8, wherein R_{245} and R_{250} are both hydrogen.

12. A compound according to claim 8, wherein the phenyl in $(CR_{245}R_{250})_1$-phenyl is substituted with

(a) 1 R_{200} group and 1 heteroaryl group optionally substituted with 1 R_{200} group; or

(b) 1 R_{200} group and 1 phenyl group optionally substituted with 1 R_{200} group; or

(c) 1 R_{200} group, and 1 heterocycloalkyl which is optionally substituted with one R_{200} or =O.

13. A compound according to claim 12, wherein $CR_{245}R_{250}$ represents a C_3-C_7 cycloalkyl group.

14. A compound according to claim 12, wherein $CR_{245}R_{250}$ represents a C_5-C_7 cycloalkyl group.

15. A compound according to claim 12, wherein $CR_{245}R_{250}$ represents a C_3-C_6 cycloalkyl group.

16. A compound according to claim 12, wherein $CR_{245}R_{250}$ represents a C_6 cycloalkyl.

17. A compound according to claim 8, wherein the phenyl in $(CR_{245}R_{250})_1$-phenyl is substituted with

1 R_{200} group; or

1 R_{200} group and one heteroaryl group optionally substituted with one R_{200} group or

1 R_{200} group and one phenyl group optionally substituted with one R_{200} group.

18. A compound according to claim 8, wherein the phenyl in $(CR_{245}R_{250})_1$-phenyl is substituted with 1 R_{200} group.

19. A compound selected from the group consisting of:

phenyl ((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[(1*S*)-7-ethyl-1,2,3,4-tetrahydronaphthalen-1-yl]amino}-2-hydroxypropyl)carbamate;

methyl (3*S*)-3-{[(2*R*,3*S*)-3-[(anilinocarbonyl)amino]-4-(3,5-difluorophenyl)-2-hydroxybutyl]amino}-3-(3-bromophenyl)propanoate;

N-((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[4-(3-ethylphenyl)tetrahydro-2*H*-pyran-4-yl]amino}-2-hydroxypropyl)-*N*'-phenylurea;

N-((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)methanesulfonamide;

N-benzyl-*N*'-((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)urea;

N-((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)-*N*'-phenylurea;

N-((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)-*N*'-propylurea;

N-(*sec*-butyl)-*N*'-((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)urea;

phenyl ((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)carbamate;

ethyl ((1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)carbamate;

N-{(1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-[(6-ethyl-3,4-dihydro-2*H*-chromen-4-yl)amino]-2-hydroxypropyl}-*N*'-phenylurea;

N-{(1*S*,2*R*)-1-(3,5-difluorobenzyl)-2-hydroxy-3-[(6-isopropyl-3,4-dihydro-2*H*-chromen-4-yl)amino]propyl}-*N*'-phenylurea;

N-[(1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-({6-[(dimethylamino)methyl]-3,4-dihydro-2*H*-chromen-4-yl}amino)-2-hydroxypropyl]-*N*'-phenylurea;

phenyl {(1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-[(6-ethyl-3,4-dihydro-2*H*-chromen-4-yl)amino]-2-hydroxypropyl}carbamate;

phenyl {(1*S*,2*R*)-1-(3,5-difluorobenzyl)-2-hydroxy-3-[(6-isopropyl-3,4-dihydro-2*H*-chromen-4-yl)amino]propyl}carbamate;

phenyl [(1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-({6-[(dimethylamino)methyl]-3,4-dihydro-2*H*-chromen-4-yl}amino)-2-hydroxypropyl]carbamate;

N-{(1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-[(6-ethyl-3,4-dihydro-1*H*-isochromen-4-yl)amino]-2-hydroxypropyl}-*N*'-phenylurea;

N-{(1*S*,2*R*)-1-(3,5-difluorobenzyl)-2-hydroxy-3-[(6-isopropyl-3,4-dihydro-1*H*-isochromen-4-yl)amino]propyl}-*N*'-phenylurea;

N-[(1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-({6-[(dimethylamino)methyl]-3,4-dihydro-1*H*-isochromen-4-yl}amino)-2-hydroxypropyl]-*N*'-phenylurea;

phenyl {(1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-[(6-ethyl-3,4-dihydro-1*H*-isochromen-4-yl)amino]-2-hydroxypropyl}carbamate;

phenyl {(1*S*,2*R*)-1-(3,5-difluorobenzyl)-2-hydroxy-3-

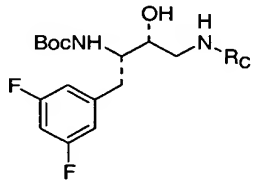
[(6-isopropyl-3,4-dihydro-1*H*-isochromen-4-yl)amino]propyl}carbamate;

phenyl [(1*S*,2*R*)-1-(3,5-difluorobenzyl)-3-({6-[(dimethylamino)methyl]-3,4-dihydro-1*H*-isochromen-4-yl}amino)-2-hydroxypropyl]carbamate;

N^3-[({(1*S*,2*R*)-1-(3,5-difluorobenzyl)-2-hydroxy-3-[(3-methoxybenzyl)amino]propyl}amino)carbonyl]-N^1,N^1-dipropyl-b-alaninamide; and

2-{[({(1*S*,2*R*)-1-(3,5-difluorobenzyl)-2-hydroxy-3-[(3-methoxybenzyl)amino]propyl}amino)carbonyl]amino}-*N*,*N*-dipropylethanesulfonamide.

20. A compound of the formula:



wherein

R_C is selected from $-(CH_2)_{0-3}-(C_3-C_8)$ cycloalkyl wherein the cycloalkyl is optionally substituted with 1, 2, or 3 groups independently selected from $-R_{205}$; and $-CO_2-(C_1-C_4$ alkyl); $-(CR_{245}R_{250})_{0-4}$-aryl; $-(CR_{245}R_{250})_{0-4}$-heteroaryl; $-(CR_{245}R_{250})_{0-4}$-heterocycloalkyl; $-(CR_{245}R_{250})_{0-4}$-aryl-heteroaryl; $-(CR_{245}R_{250})_{0-4}$-aryl-heterocycloalkyl; $-(CR_{245}R_{250})_{0-4}$-aryl-aryl; $-(CR_{245}R_{250})_{0-4}$-heteroaryl-aryl; $-(CR_{245}R_{250})_{0-4}$-heteroaryl-heterocycloalkyl; $-(CR_{245}R_{250})_{0-4}$-heteroaryl-heteroaryl; $-CHR_{245}-CHR_{250}$-aryl; $-(CR_{245}R_{250})_{0-4}$-heterocycloalkyl-heteroaryl; $-(CR_{245}R_{250})_{0-4}$-heterocycloalkyl-heterocycloalkyl; $-(CR_{245}R_{250})_{0-4}$-heterocycloalkyl-aryl; a monocyclic or bicyclic ring of 5, 6, 7 8, 9, or 10 carbons fused to 1 or 2 aryl, heteroaryl, or heterocycloalkyl groups;

wherein 1, 2 or 3 carbons of the monocyclic or bicyclic ring are optionally replaced with -NH-, $-N(CO)_{0-1}R_{215}$-,

$-N(CO)_{0-1}R_{220}-$, $-O-$, or $-S(=O)_{0-2}-$, and wherein the monocyclic or bicyclic ring is optionally substituted with 1, 2 or 3 groups that are independently $-R_{205}$, $-R_{245}$, $-R_{250}$ or =O;

and $-C_2-C_6$ alkenyl optionally substituted with 1, 2, or 3 R_{205} groups;

wherein each aryl or heteroaryl group attached directly or indirectly to the $-(CR_{245}R_{250})_{0-4}$ group is optionally substituted with 1, 2, 3 or 4 R_{200} groups;

wherein each heterocycloalkyl attached directly or indirectly to the $-(CR_{245}R_{250})_{0-4}$ group is optionally substituted with 1, 2, 3, or 4 R_{210};

R_{200} at each occurrence is independently selected from $-C_1-C_6$ alkyl optionally substituted with 1, 2, or 3 R_{205} groups; -OH; $-NO_2$; -halogen; $-C\equiv N$; $-(CH_2)_{0-4}-CO-NR_{220}R_{225}$; $-(CH_2)_{0-4}-CO-(C_1-C_8$ alkyl); $-(CH_2)_{0-4}-CO-(C_2-C_8$ alkenyl); $-(CH_2)_{0-4}-CO-(C_2-C_8$ alkynyl); $-(CH_2)_{0-4}-CO-(C_3-C_7$ cycloalkyl); $-(CH_2)_{0-4}-(CO)_{0-1}-$aryl; $-(CH_2)_{0-4}-(CO)_{0-1}-$heteroaryl; $-(CH_2)_{0-4}-(CO)_{0-1}-$heterocycloalkyl; $-(CH_2)_{0-4}-CO_2R_{215}$; $-(CH_2)_{0-4}-SO_2-NR_{220}R_{225}$; $-(CH_2)_{0-4}-S(O)_{0-2}-(C_1-C_8$ alkyl); $-(CH_2)_{0-4}-S(O)_{0-2}-(C_3-C_7$ cycloalkyl); $-(CH_2)_{0-4}-N(H$ or $R_{215})-CO_2R_{215}$; $-(CH_2)_{0-4}-N(H$ or $R_{215})-SO_2-R_{220}$; $-(CH_2)_{0-4}-N(H$ or $R_{215})-CO-N(R_{215})_2$; $-(CH_2)_{0-4}-N(-H$ or $R_{215})-CO-R_{220}$; $-(CH_2)_{0-4}-NR_{220}R_{225}$; $-(CH_2)_{0-4}-O-CO-(C_1-C_6$ alkyl); $-(CH_2)_{0-4}-O-(R_{215})$; $-(CH_2)_{0-4}-S-(R_{215})$; $-(CH_2)_{0-4}-O-(C_1-C_6$ alkyl optionally substituted with 1, 2, 3, or 5 -F); $-C_2-C_6$ alkenyl optionally substituted with 1 or 2 R_{205} groups; $-C_2-C_6$ alkynyl optionally substituted with 1 or 2 R_{205} groups; adamantly, and $-(CH_2)_{0-4}-C_3-C_7$ cycloalkyl;

each aryl and heteroaryl group included within R_{200} is optionally substituted with 1, 2, or 3 groups that are independently $-R_{205}$, $-R_{210}$ or $-C_1$-C_6 alkyl substituted with 1, 2, or 3 groups that are independently R_{205} or R_{210};

each heterocycloalkyl group included within R_{200} is optionally substituted with 1, 2, or 3 groups that are independently R_{210};

R_{205} at each occurrence is independently selected from $-C_1$-C_6 alkyl, $-C_2$-C_6 alkenyl, $-C_2$-C_6 alkynyl, $-C_1$-C_6 haloalkoxy, $-(CH_2)_{0-3}(C_3$-C_7 cycloalkyl), -halogen, $-(CH_2)_{0-6}$-OH, -O-phenyl, OH, SH, $-(CH_2)_{0-6}$-C≡N, $-(CH_2)_{0-6}$-C(=O)$NR_{235}R_{240}$, $-CF_3$, $-C_1$-C_6 alkoxy, C_1-C_6 alkoxycarbonyl, and $-NR_{235}R_{240}$;

R_{210} at each occurrence is independently selected from $-C_1$-C_6 alkyl optionally substituted with 1, 2, or 3 R_{205} groups; $-C_2$-C_6 alkenyl optionally substituted with 1, 2, or 3 R_{205} groups; C_1-C_6 alkanoyl; $-SO_2-(C_1$-C_6 alkyl); $-C_2$-C_6 alkynyl optionally substituted with 1, 2, or 3 R_{205} groups; -halogen; $-C_1$-C_6 alkoxy; $-C_1$-C_6 haloalkoxy; $-NR_{220}R_{225}$; -OH; -C≡N; $-C_3$-C_7 cycloalkyl optionally substituted with 1, 2, or 3 R_{205} groups; $-CO-(C_1$-C_4 alkyl); $-SO_2-NR_{235}R_{240}$; $-CO-NR_{235}R_{240}$; $-SO_2-(C_1$-C_4 alkyl); and =O;

R_{215} at each occurrence is independently selected from $-C_1$-C_6 alkyl, $-(CH_2)_{0-2}$-(aryl), $-C_2$-C_6 alkenyl, $-C_2$-C_6 alkynyl, $-C_3$-C_7 cycloalkyl, $-(CH_2)_{0-2}$-(heteroaryl), and $-(CH_2)_{0-2}$-(heterocycloalkyl); wherein the aryl group included within R_{215} is optionally substituted with 1, 2, or 3 groups that are independently $-R_{205}$ or $-R_{210}$; wherein the heterocycloalkyl and heteroaryl groups included

within R_{215} are optionally substituted with 1, 2, or 3 R_{210};

R_{220} at each occurrence is independently H, -C_1-C_6 alkyl, -CHO, hydroxy C_1-C_6 alkyl, C_1-C_6 alkoxycarbonyl, -amino C_1-C_6 alkyl, -SO_2-C_1-C_6 alkyl, C_1-C_6 alkanoyl optionally substituted with up to three halogens, -$C(O)NH_2$, -$C(O)NH(C_1$-C_6 alkyl), -$C(O)N(C_1$-C_6 alkyl)(C_1-C_6 alkyl), -halo C_1-C_6 alkyl, -$(CH_2)_{0-2}$-(C_3-C_7 cycloalkyl), -(C_1-C_6 alkyl)-O-(C_1-C_3 alkyl), -C_2-C_6 alkenyl, -C_2-C_6 alkynyl, -aryl, -heteroaryl, or -heterocycloalkyl; wherein the aryl, heteroaryl and heterocycloalkyl groups included within R_{220} and R_{225} is optionally substituted with 1, 2, or 3 R_{270} groups,

R_{270} at each occurrence is independently -R_{205}, -C_1-C_6 alkyl optionally substituted with 1, 2, or 3 R_{205} groups; -C_2-C_6 alkenyl optionally substituted with 1, 2, or 3 R_{205} groups; -C_2-C_6 alkynyl optionally substituted with 1, 2, or 3 R_{205} groups; -phenyl; -halogen; -C_1-C_6 alkoxy; -C_1-C_6 haloalkoxy; -$NR_{235}R_{240}$; -OH; -C≡N; -C_3-C_7 cycloalkyl optionally substituted with 1, 2, or 3 R_{205} groups; -CO-(C_1-C_4 alkyl); -SO_2-$NR_{235}R_{240}$; -CO-$NR_{235}R_{240}$; -SO_2-(C_1-C_4 alkyl); and =O;

R_{235} and R_{240} at each occurrence are independently -H, -C_1-C_6 alkyl, C_2-C_6 alkanoyl, -SO_2-(C_1-C_6 alkyl), or -phenyl;

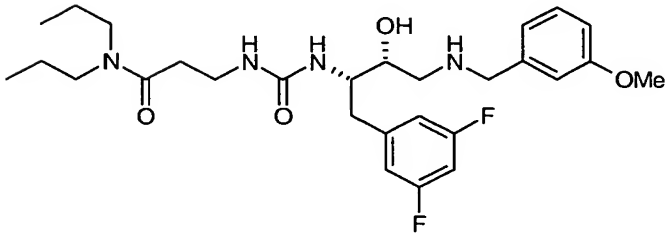
R_{245} and R_{250} at each occurrence are independently selected from H, -$(CH_2)_{0-4}CO_2C_1$-C_4 alkyl, -$(CH_2)_{0-4}C(=O)C_1$-C_4 alkyl, -C_1-C_4 alkyl, -C_1-C_4 hydroxyalkyl, -C_1-C_4 alkoxy, -C_1-C_4 haloalkoxy, -$(CH_2)_{0-4}$-C_3-C_7 cycloalkyl, -C_2-C_6 alkenyl, -C_2-

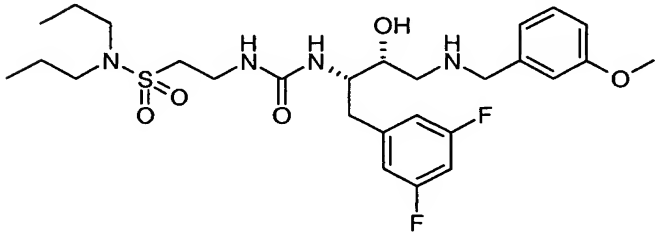
C_6 alkynyl, $-(CH_2)_{0-4}$ aryl, $-(CH_2)_{0-4}$ heteroaryl, and $-(CH_2)_{0-4}$ heterocycloalkyl, or

R_{245} and R_{250} are taken together with the carbon to which they are attached to form a monocycle or bicycle of 3, 4, 5, 6, 7 or 8 carbon atoms, where 1, 2, or 3 carbon atoms are optionally replaced by 1, 2, or 3 gropus that are independently -O-, -S-, $-SO_2-$, -C(O)-, $-NR_{220}-$, or $-NR_{220}R_{220}-$ wherein both R_{220} groups are alkyl; and wherein the ring is optionally substituted with 1, 2, 3, 4, 5, or 6 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, hydroxyl, NH_2, $NH(C_1-C_6$ alkyl), $N(C_1-C_6$ alkyl)$(C_1-C_6$ alkyl), $-NH-C(O)C_1-C_5$ alkyl, $-NH-SO_2-(C_1-C_6$ alkyl), or halogen;

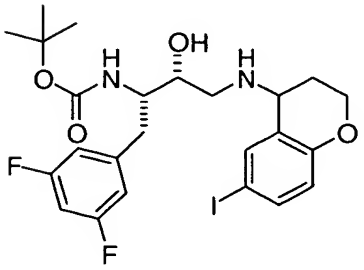
wherein the aryl, heteroaryl or heterocycloalkyl groups included within R_{245} and R_{250} are optionally substituted with 1, 2, or 3 groups that are independenly halogen, C_{1-6} alkyl, CN or OH.

21. A compound which has the formula:





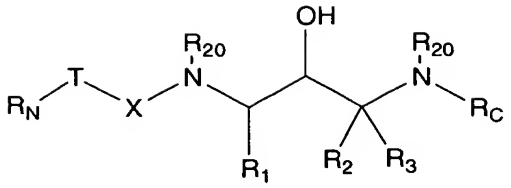
or



or a pharmaceutically acceptable salt thereof.

22. A method of treating a patient who has, or in preventing a patient from getting, a disease or condition selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative dementias, including dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment which comprises administration of a therapeutically effective amount of a compound selected from the group consisting of a substituted aminoalcohol of the formula (I), or a pharmaceutically acceptable salt or ester thereof, wherein X, T, R_{20}, R_1, R_2, R_3, R_N and Rc are as defined in claim 1.

23. A method for making a compound of formula I



or a pharmaceutically acceptable salt or ester thereof, wherein X, T, R_{20}, R_1, R_2, R_3, R_N and R_C are as defined in claim 1.